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USAF/SAMSO: Stever, H. Guyford Corr.

1966-1968

H. GUYFORD STEVER
5000 FORBES AVENUE
PITTSBURGH, PENNSYLVANIA 15213

December 12, 1966

Dear Edward:

Here is a long-term, serious problem faced by the SAB. Clearly, we have no deadline on which we must take action, which possibly makes the problem worse. The Nuclear Panel (and its predecessor group on the Armaments Panel) has long been one of the most productive units of the SAB. It is no longer such.

I do not have to detail the long history of the Nuclear Panel to you, for you were part of it. Its importance grew directly following World War II, became even greater during the hydrogen bomb era, and continued at a peak during the ICBM era. Today, however, as a panel it is not producing.

I cannot accuse the members of the Panel of being lax in their service to government. There is no question that there efforts were siphoned off from the SAB, for a while on the work of the Open Air Panel and then by various organizations of the Office of the Secretary of Defense. Further, a number of the Nuclear Panel are quite active in our DAG work, so they cannot be faulted on the basis of time served.

It may be necessary to recognize that this particular group of nuclear types are now so committed in other areas that they will not be able to carry out Panel work and that we need an entirely new slate. It may be that nuclear inputs in the Air Force are needed only at the Division levels, though I doubt it. It may be that the higher echelons of the Air Force have been cut out of the sphere of effective action by activities of the Office of the Secretary of Defense. If this is the case, then we should strengthen the higher echelons of the Air Force by good Panel action at the SAB level.

Colonel Burger had a long talk with Al Latter on this subject. Al points out several things. One is that a member of the nuclear community can get his ideas to the point in government where the action is, more easily by advising other than Air Force types. He also points out that the nuclear involvement of the Air Force is not pure--nuclear considerations enter as part of larger problems, and possibly the SAB is not organized properly.

I think it is time for the Executive Committee of the SAB to have a session on the problem of organizing for effectiveness.

What are your thoughts?

Best regards.

Sincerely yours,

Guy

H. Guyford Stever

Dr. Edward Teller
Professor of Physics-at-Large
and Associate Director
Lawrence Radiation Laboratory
Berkeley, California 94702

cc: General Ferguson
Lt. General Holzapple
Professor Perkins
Dr. Cannon
Colonel Burger

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, D.C.

DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

17 January 1967

ANNOUNCEMENT

TO: SAB MEMBERS AND ASSOCIATE ADVISORS

I am pleased to announce that on 1 January 1967 the Chief of Staff appointed Dr. Edward Teller a vice-chairman of the USAF Scientific Advisory Board. In this position, Dr. Teller will assist Professor Perkins and myself in directing the functions of the Board.

I am sure all members of the SAB join me in congratulating Dr. Teller on his appointment to this position.

H Guyford Stever

H. GUYFORD STEVER
Chairman
USAF Scientific Advisory Board

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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, D.C. 20330

DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

24 February 1967

REPLY TO ATTN OF: AFBSA

SUBJECT: Improving Effectiveness of the Scientific Advisory Board

TO: SAB Panel Chairmen

1. Further to my 5 January 1967 letter to all members of the SAB Executive Committee on the above subject, I would like to re-emphasize to you the importance that I am attaching to this subject and my desire to have an open-forum, critical-introspection type of discussion on it at our Executive Committee meeting in April.

2. To that end, in order to have as many views as possible for consideration, I would like for each of you to solicit from each of your panel members their ideas on ways of improving the effectiveness of the SAB. I will leave it to each of you to review your panel's suggestions and decide which ideas you will want to present to the Executive Committee.

3. For your information, I am also asking the Air Force Secretary, Chief of Staff and Military Director for their ideas on this subject.

4. I am looking forward to a spirited discussion on this topic at our April Executive Committee meeting, and I hope we can come up with some useful ideas for increasing our effectiveness.

H Guyford Stever

H. GUYFORD STEVER
Chairman
USAF Scientific Advisory Board

Cy to: ✓Dr. Teller

Prof. Courtland D. Perkins
Dr. Gerald M. McDonnel
Mr. Burton P. Brown
Dr. Richard W. Porter
Dr. S. W. Herwald
Dr. Fred M. Tonge
Dr. Albert Latter
Dr. Allen F. Donovan
Dr. Launor F. Carter

Underwrite Your Country's Might - Buy U.S. Savings Bonds

February 27, 1967

Dr. H. Guyford Stever
Chairman, Scientific Advisory Board
Office of the Chief of Staff
Headquarters United States Air Force
Washington, D. C. 20330

Dear Guy:

Albert and I have discussed the question of the Nuclear Panel. As you have heard from him, he has to withdraw from the chairmanship for reasons of health. I hope that in a year or two he might be able to resume his most efficient work.

In the meantime (and perhaps for a longer period) the best person to carry on these duties would seem to be Dr. Biehl who is thoroughly conversant with all problems. He worked for DDR&E for some time and is one of the most open-minded and ingenious people in the field. I hope that I may proceed to discuss with him details of the topics we should take up.

Also I am in complete agreement with Albert that a direct connection should be worked out between the Nuclear Panel and an appropriately chosen high Air Force officer.

It would be wonderful of you to let me know howyou react to these various proposals. I hope to write to you shortly about the topics that the Panel might look into. In the meantime any suggestion from you concerning these topics or concerning the other points that have been mentioned would be most helpful.

Needless to say, it will take a little twisting of the arm if Art Biehl is to take on this additional duty, but I hope that as usual you may prove to be irrestible.

Sincerely yours,

Edward Teller

ET:gp

November 29, 1967

Dr. H. Guyford Stever
President
Carnegie Institute of Technology
Pittsburgh, Pennsylvania 15213

Dear Guy:

In connection with the Air Force SAB meeting at Eglin AFB, I heard criticism from several sources. The simple content of this criticism is that the talks were not sufficiently informative and therefore not stimulating.

It seemed to me of some importance to bring this criticism to your attention, and I have asked therefore three of my good friends, Art Biehl, Albert Latter, and Roland Herbst to give me their opinion. The results of their discussion are summarized in a letter from Art Biehl to me, a copy of which is enclosed herewith. I should emphasize that I have obtained this letter simply by asking for an honest opinion.

It seems to be quite important that in the preparation of our Spring Meeting, the suggestions made on the second page of Biehl's memorandum should be considered. In connection with planning our meeting on ABM I found that Bob Cannon was extraordinarily helpful. I hope that his influence can be used to the fullest extent in planning the next meeting.

It might be a good idea if you would show Biehl's letter to Bob Cannon or at least if you would transmit its contents to him verbally. Otherwise it might be better not to let the criticism go any farther and not to show Biehl's letter to more people. Both Art and Albert were extremely strong in their negative opinion (the letter is really a muted version), but they felt that not much good could come from mere criticism. The letter has been written only to make it easy to let you and maybe Bob Cannon know about this point of view.

With best regards,

Edward Teller

ET:gp
Enclosure

L RENCE RADIATION LABORATORY
ROOM: BLDG.: Ext.:

MEMORANDUM November 27, 1967

TO: Edward Teller

FROM: Art Biehl

Pursuant to our discussion and in reply to your request for suggestions for improving the SAB General Board Meetings I would like to comment as follows:

1) I have taken the opportunity to discuss this with a number of other SAB members and believe there is some unanimity of opinion as to how the SAB meetings could be improved. Quite obviously, such a question solicits a showing of personal prejudice and personal interests. I have tried to weed these out to the best of my ability, but am left with a not entirely complimentary set of comments.

2) Relative to improvements, most everyone seemed to think accommodations, general choice of subject matter, and the general conduction of the meetings have been fine, with perhaps only the somewhat unrealistic suggestion that discussion and rapport between speakers and the audience are limited; this is probably due to the size of the meetings.

3) On the subject of individual speakers and the speakers' individual subject matter, there appears to be the opinion that there was not adequate technical content for such a scientific audience. Many of the speakers' talks were almost of a non-technical nature, with emphasis on management difficulties, etc. and a number of working scientific members of the SAB were bluntly bored.

It was also noted that certain talks were delivered so as to prohibit questions. Other talks were apparently given without preparation on the part of the speakers and in some cases were of the "fatherly" approach, as though to talk down to the audience. Thus, in brief, without mentioning any specific names or speakers, the most general dissatisfaction with the past meeting was that after hearing the lectures, one walked out without really feeling any better informed than when one walked into the meeting.

4) Specific suggestions to improve future meetings are:

   a) Plan meetings carefully to insure that the technical content is of such a level as to be appropriate to an audience consisting of Ph.D. level scientists and engineers (this is a scientific advisory board).

   b) Choose the speakers for their technical excellence and their ability to deliver a technical lecture rather than for their rank or position in various organizations.

   c) If there are management problems of interest, they should be limited to a single speaker rather than everyone trying to give the "big picture" from a management viewpoint.

   d) Even though it is difficult, an attempt should be made for the audience to be able to ask technical questions and the speakers should be of such technical excellence as to be able to answer them.

In conclusion, I hope that after the next meeting, members of the SAB will leave feeling that they have learned something and perhaps contributed toward making our Air Force a better Air Force.

H. GUYFORD STEVER
5000 FORBES AVENUE
PITTSBURGH, PENNSYLVANIA 15213

April 2, 1968

Dear Edward:

I think it quite pertinent for you to reconvene your ad hoc panel to discuss the second incident mentioned in your recent letter. If such a reconvening occurs before the Board meeting at Edwards Air Force Base, fine. And if not, we will have a chance to discuss this in the Steering Committee meeting on that occasion. I understand you will be at the meeting on the second day, and the Steering Committee is scheduled at lunch time.

I look forward to seeing you in California, and hope something can come out of a new look by your ad hoc panel as you propose.

Best regards.

Sincerely yours,

H. Guyford Stever

Dr. Edward Teller
Lawrence Radiation Laboratory
P. O. Box 808
Livermore, California 94550

April 3, 1968

Dr. Robert H. Cannon, Jr., Chief Scientist
Office of the Chief of Staff
Department of the Air Force
The Pentagon, 4E320
Washington, D. C.

Dear Bob:

Please find enclosed material on Dr. Harold P. Smith, Jr., whom we have discussed as possible Chief Scientist of the Air Force.

My own opinion of Harold Smith is high and is reinforced by the evaluation of my colleagues in Livermore, who have more contact with him than I do. I also know that his immediate supervisor in Berkeley, Dr. Hans Mark, holds him in high esteem. All this has resulted in his designation as a White House Fellow in 1966-67.

As I told you, I have also discussed the matter of his appointment with John Foster. I hope that you have a first-hand expression of Johnny's opinion, and I know that you will take that into account as well.

In any case I feel strongly that Harold Smith should be invited to join the SAB. If he is not now offered the job of Chief Scientist, I think that his name should be kept definitely in mind for that job on a future occasion.

Sincerely yours,

Edward Teller

ET:gp

cc: Dr. H. Guyford Stever
Lt. Gen. Joseph R. Holzapple

Harold P. Smith, Jr.
656 Vincente Avenue
Berkeley, California
Age: 32
Professor

Dr. Harold P. Smith, Jr., Associate Professor of Nuclear Engineering at the University of California (Berkeley) was a resident of Pittsburgh, Pennsylvania until 1953 when he was enrolled at the Massachusetts Institute of Technology as an Alfred P. Sloan National Scholar. After receiving the Bachelor's degree in Mechanical Engineering in 1957, he was awarded a Nuclear Technology Fellowship for graduate study in Nuclear Engineering at MIT, and received the Ph.D. degree in 1960.

He accepted an appointment to the faculty of the University of California immediately upon graduation and has pursued analytical and experimental studies of gas dynamics, nuclear reactor dynamics, and radiation-surface interactions. During 1961-62, he served as Second Lieutenant, USA, assigned to research in laser beam-surface interaction at the Ballistic Research Laboratories, and in 1966-67, he was awarded a White House Fellowship and served as a Special Assistant to the Secretary of Defense.

He is the author of many professional papers, a consultant to the Office of the Secretary of Defense, the Lawrence Radiation Laboratory (Livermore), and various non-profit and industrial research laboratories. He is a member of the American Physical Society and the American Nuclear Society.

RESUME

Name:	Harold P. Smith, Jr.	
Born:	November 30, 1935	
Education:	B.S. (Mechanical Engineering)	MIT, 1957
	M.S. (Nuclear Engineering)	MIT, 1958
	PhD (Nuclear Engineering)	MIT, 1960
Honorary Societies:	Tau Beta Pi, Sigma Xi	
Professional Societies:	American Physical Society, American Nuclear Society	
Awards:	Sloan National Scholarship	1953-1957
	Nuclear Technology Fellowship	1957-1960
	White House Fellowship	1966-1967
Employment:	Assistant Professor of Nuclear Engineering, University of California, Berkeley	1960-1966
	Physicist, Ballistics Research Laboratories, Aberdeen, Maryland (Military leave of absence from UCB)	1961-1962
	Associate Professor of Nuclear Engineering, U. of Cal.,Berk.	1966-date
	White House Fellow on assignment to the Secretary of Defense(Leave of absence from UCB)	1966-1967
Research Contracts and Grants:	Principal Investigator, "Kilovolt Ion Sputtering," NASA Contract NAS-3-5743 ($203,066)	1964-1967
	Princ. Invest., "Measurement of Surface Density by a Proton Induced Characteristic X-ray Technique," NASA Contract NAS-3-7118(F)($55,636)	1965-1966
	Princ, Invest., "Laser-Surface Interaction: Creation & Detection of an Atomically Clean Surface," NASA Grant NSG 05-003-161 ($157,423)	1966-1968
	Princ. Invest.,"Dynamical Theory of Low Energy Electron Diffraction" NGR 05-003-275 ($18,672.00)	1968-

Consulting:

Northern Research and Engineering Cambridge,Massachusetts	1960-1961
Avco Corporation Wilmington, Massachusetts	1962-1963 1966-1968
University of California Lawrence Radiation Laboratory Livermore, California	1964-1968
Hughes Research Laboratories Malibu, California	1965-1968
Gulf General Atomic La Jolla, California	1966-1968
The Boeing Company Seattle, Washington	1968
Office of the Secretary of Defense (Defense Science Board Task Force on Vulnerability)	1968
Institute for Defense Analyses Arlington, Virginia	1968
Research Analysis Corporation McLean, Virginia	1968

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"Reply to a Note by Dr. J. Lewins and a Simplified Development of the Maximum Principle", (with J. J. Roberts), Nucl. Sci. and Eng. 24, 95 (1966).

"Comments on 'Application of Dynamic Programming to Optimal Shutdown Control'" (with J. J. Roberts), Nucl. Sci. and Eng. 25, 212 (1966).

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